CLAIMS

1.   A method for recording message activity in a log,
the method comprising the steps of:

receiving a request from an application to put a
message, comprising message data, to a queue; and

detecting whether there is a previous occurrence of
the message data in the log, and if there is not a
previous occurrence writing a log record including the
message data, but if there is a previous occurrence
writing a log record including a reference for locating
the previous occurrence of the message data in the log.

2.   A method as claimed in claim 1 wherein the request
to put a message includes an indication that the message
data was put to a message queue or got from a message
queue in a previous request from the application.

3.   A method as claimed in claim 2 wherein the
indication is a value which indicates that the message
data was involved in the immediately preceding request
from the application.

4.   A method as claimed in claim 2 wherein the
indication is a token which uniquely identifies the
message data within the scope of the application.

5.   A method as claimed in claim 1 further comprising
the steps:

receiving a request from the application to get a
message, comprising message data, from a queue; and

storing a reference, separate from the log and
associated with the application, for locating a previous
occurrence of the message data in the log.

6.   A method as claimed in claim 1 wherein if the
detecting step detects that there is not a previous
occurrence of the message data in the log it further
stores a reference, separate from the log and associated
with the message, for subsequently locating the message
data in the log.

7.   A method for detecting the re-use of message data
comprising the steps:

receiving a request from an application to put a
message, comprising message data, to a queue; and

detecting, based on an indicator included with the
request, that the message data was previously put to a
message queue or got from a message queue by the
application.

8.   A method as claimed in claim 7 wherein the indicator
is a value which indicates that the message data was

involved in the immediately preceding request from the
application.

9.   A method as claimed in claim 7 wherein the indicator
is a token which uniquely identifies the message data
within the scope of the application.

10.   A computer program product, recorded on a medium,
comprising instructions which, when executed on a data
processing host, causes said host to carry out a method
comprising the steps:

    receiving a request from an application to put a
message, comprising message data, to a queue; and

    detecting whether there is a previous occurrence of
the message data in the log, and if there is not a
previous occurrence writing a log record including the
message data, but if there is a previous occurrence
writing a log record including a reference for locating
the previous occurrence of the message data in the log.

11. A computer program product as claimed in claim 10
wherein the request to put a message includes an
indication that the message data was put to a message
queue or got from a message queue in a previous request
from the application.

12. A computer program product as claimed in claim 11
wherein the indication is a value which indicates that

the message data was involved in the immediately
preceding request from the application.

13.   A computer program product as claimed in claim 11
wherein the indication is a token which uniquely
identifies the message data within the scope of the
application.

14.   A computer program product as claimed in claim 10
further comprising the steps:

      receiving a request from the application to get a
message, comprising message data, from a queue; and

      storing a reference, separate from the log and
associated with the application, for locating a previous
occurrence of the message data in the log.

15.   A computer program product as claimed in claim 10
wherein if the detecting step detects that there is not a
previous occurrence of the message data in the log it
further stores a reference, separate from the log and
associated with the message, for subsequently locating
the message data in the log.

16.   A computer program product, recorded on a medium,
comprising instructions which, when executed on a data
processing host, causes said host to carry out a method
comprising the steps:

receiving a request from an application to put a
message, comprising message data, to a queue; and

detecting, based on an indicator included with the
request, that the message data was previously put to a
message queue or got from a message queue by the
application.

17.   A computer program product as claimed in claim 16
wherein the indicator is a value which indicates that
the message data was involved in the immediately
preceding request from the application.

18.   A computer program product as claimed in claim 16
wherein the indicator is a token which uniquely
identifies the message data within the scope of the
application.

19.   A data processing apparatus comprising:

a non-volatile memory storage device for storing log
records thereon in a log comprising one or more log
files;

a volatile memory storage device;

means for receiving a request from an application to
put a message, comprising message data, to a queue;

means for detecting whether there is a previous occurrence of the message data in the log;

means responsive to failing to detect a previous occurrence of the data in the log for writing a log record including the message data; and

means responsive to detecting a previous occurrence of the data in the log for writing a log record including a reference for locating the previous occurrence of the message data in the log.

20. An apparatus as claimed in claim 19 wherein the request to put a message includes an indication that the message data was put to a message queue or got from a message queue in a previous request from the application.

21. An apparatus as claimed in claim 20 wherein the indication is a value which indicates that the message data was involved in the immediately preceding request from the application.

22. An apparatus as claimed in claim 21 wherein the indication is a token which uniquely identifies the message data within the scope of the application.

23. An apparatus as claimed in claim 19 further comprising:

means for receiving a request from the application to get a message from the queue; and

means for storing a reference, separate from the log and associated with the application, for locating a previous occurrence of the message data in the log.

24. An apparatus as claimed in claim 19 further comprising:

means responsive to failing to detect a previous occurrence of the message data in the log for storing a reference, separate from the log and associated with the message, for subsequently locating the message data in the log.

25. A data processing apparatus comprising:

means for receiving a request from an application to put a message, comprising message data, to a queue; and

means for deducing, based on an indicator included with the request, that the message data was previously put to a message queue or got from a message queue by the application.

26. A data processing apparatus as claimed in claim 25 wherein the indicator is a value which indicates that the message data was involved in the immediately preceding request from the application.

27. A data processing apparatus as claimed in of claim
25 wherein the indicator is a token which uniquely
identifies the message data within the scope of the
application.